

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Anthony Bruce Pike	Examiner:	Nelson, Keri Jessica
Application No.:	10/561,752	Group Art Unit:	3772
Confirmation No:	1633	Docket:	2163-2 PCT/US/RCE
§ 371(c) Date:	January 26, 2006	§ 371 Filing:	December 21, 2005

For: MEDICAL PROTECTION SHEETING

**DECLARATION OF PRIOR INVENTION IN THE UNITED STATES TO
OVERCOME CITED PRIOR ART UNDER 37 C.F.R. §1.131**

1. I, Anthony Bruce Pike, a citizen of the United Kingdom, residing at 10 Auckland Close, Upper Norwood, London SE19 2DN, Great Britain, am the inventor for the U.S. Application No. 10/561,752 and am the inventor for priority applications, i.e., PCT/GB04/02740, filed June 24, 2004 and GB 0314659.4, filed June 24, 2003.

2. I am currently employed as Technical Director for APA Parafricta Limited, the assignee of the present application, and I am authorized to make this Declaration on behalf of APA Parafricta Limited.

3. I have read the Office Action dated May 18, 2011 in which certain below-mentioned references were cited.

4. I submit this declaration to establish completion of the invention set forth in this application at a date prior to February 21, 2003, the noted publication date of "DuPont Airbag Fiber Offerings" (hereinafter "DuPont Reference") which was cited by the Examiner in the Office Action mailed, May 18, 2011.

5. I also submit this declaration to establish completion of the invention set forth in this application at a date prior to May 15, 2003, the priority date for U.S. Patent Application No. 2006/0252322 to DeBenedictis et al. (hereinafter "DeBenedictis") which was also cited by the Examiner in the Office Action mailed, May 18, 2011.

6. From the documents submitted herewith and as set forth herein below, it can be seen that the invention set forth in the claims of this application was completed in a WTO member country prior February 21, 2003, which is a date earlier than the alleged publication date of the DuPont Reference, and was completed in a WTO member country prior May 15, 2003, which is a date earlier than the priority date of DeBenedictis. Such completion being evidenced conception of the invention and reduction to practice of the complete invention with diligence at a date prior to the alleged publication date of the DuPont Reference and prior to the priority date of DeBenedictis. Exhibits A through Q are submitted in support thereof. The Exhibits A through Q are being submitted with their dates redacted. The actual document dates of Exhibits A through I are prior to February 21, 2003. The actual document dates of Exhibits J through O are after February 21, 2003, but prior to the filing of the priority application, i.e., GB 0314659.4, on June 24, 2003. A brief description of the documents being submitted is as follows:

- a. A copy of an email, dated prior February 21, 2003, from myself to Martin Ferguson-Pell is enclosed as EXHIBIT A. Martin Ferguson-Pell at that time was a professor at the University College, London, and a consultant at the Royal National Orthopaedic Hospital, Stanmore London. The email evidences conception of my invention for the application of friction-free fabric for the problem of pressure sores.

- b. A copy of an email, dated prior February 21, 2003, from John A. Barnes to myself is enclosed as EXHIBIT B. John A Barnes of DuPont provided certain fabric data to me.
- c. A copy of a receipt, dated prior February 21, 2003, is enclosed as EXHIBIT C, which evidences my receipt of a certain fabric from DuPont (U.K.) Limited.
- d. A copy of an email, dated prior February 21, 2003, is enclosed as EXHIBIT D, from myself to Michael Clark, evidencing continued development of my invention for the application of friction-free fabric for the problem of pressure sores.
- e. A copy of an email, dated prior February 21, 2003, from Mark Gee of National Physical Laboratory to myself is enclosed as EXHIBIT E. The email included an attachment entitled "Friction Measurements of Parafricta Fabric" from National Physical Laboratory. The exhibit reports testing results on a fabric I had provided under my instruction to National Physical Laboratory. Such testing results were subsequently used in my patent application.
- f. A copy of an email, dated prior February 21, from Michael Clark to myself is enclosed as EXHIBIT F. The email included an attachment entitled "Some REVISED thoughts for "Parafricta Slip Sheet" patent application". The attachment represents an exchange of ideas, such as applying force equations to explain my invention.

Michael Clark at the time was under my instruction to assist me in technical issues.

- g. A copy of an email, dated prior February 21, 2003, from Patricia Grocott to myself is enclosed as EXHIBIT G. The email chain in EXHIBIT G evidences, in part, my endeavors to provide materials of my present invention for trial purposes to Dr. Patricia Grocott of the Florence Nightingale School of Nursing and Midwifery at King's College, London. Such discussions were provided under a Confidentiality Agreement.
- h. A copy of an email, dated prior February 21, 2003, from John A. Barnes to myself is enclosed as EXHIBIT H, which evidences my receipt of additional fabric details.
- i. A copy of an email, dated prior February 21, 2003, from myself to Michael Clark is enclosed as EXHIBIT I, in which I forwarded fabric details to Michael Clark.
- j. A copy of certain invoices, dated post February 21, 2003 and prior May 15, 2003, is enclosed as EXHIBIT J. The invoices are related to the preparation of prototype samples of the articles of my invention by C. Taylor, who I had so contracted to prepare such articles.
- k. A copy of an email, dated post February 21, 2003 and prior May 15, 2003, Mark Gee to myself enclosing additional testing results from of National Physical Laboratory is enclosed as EXHIBIT K.

- l. A copy of a letter, dated post February 21, 2003 and prior May 15, 2003, from myself to Tony Choy-Sing is enclosed as EXHIBIT L, which evidences continued efforts between myself and DuPont.
- m. A copy of an email, dated post February 21, 2003 and prior May 15, 2003, from Tony Choy-Sing to myself is enclosed as EXHIBIT M, which represents continued efforts between myself and DuPont.
- n. A copy of a receipt, dated post February 21, 2003 and prior May 15, 2003, is enclosed as EXHIBIT N, which evidences my receipt of certain fabric from DuPont (U.K.) Limited.
- o. A copy of a letter, dated post February 21, 2003 and prior May 15, 2003, is enclosed as EXHIBIT O, which evidences my continued relationship with DuPont in commercializing my invention.
- p. A copy of a letter, dated post May 15, 2003, from Raworth Moss & Cook reporting the filing of the priority application for my present invention, i.e., GB 0314659.4, on June 24, 2003 is enclosed as EXHIBIT P. Enclosed with the letter is a debit note from Raworth Moss & Cook evidencing their efforts in the preparation and filing of the priority application.
- q. EXHIBIT Q is a summary of my Diary Records of meetings with DuPont during time periods prior February 21, 2003 and post February 21, 2003 up until the filing of the GB 0314659.4 patent priority application.

7. The above-referenced Exhibits establish a date of reduction to practice prior to the alleged effective date of the DuPont Reference, i.e. February 21, 2003, and/or conception of the invention prior to the alleged effective date of the DuPont Reference, i.e. February 21, 2003, coupled with due diligence to subsequent reduction to practice of the complete invention or to the filing of the GB 0314659.4 patent application.

8. The above-referenced Exhibits also establish a date of reduction to practice prior to the effective date of the DeBenedictis Reference, i.e. May 15, 2003, and/or conception of the invention prior to the effective date of the DeBenedictis Reference, i.e. May 15, 2003, coupled with due diligence to subsequent reduction to practice of the complete invention or to the filing of the GB 0314659.4 patent application.

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I hereby declare that all statements made herein of my knowledge are true and that all statements made on information or belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: 12 October 2011



Anthony Bruce Pike

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(973) 331-1700

Exhibit A

From: Tony Pike [tony@parafricta.com]
Sent: [REDACTED]
To: m.ferguson-pell@ucl.ac.uk
Cc: Michael Clark
Subject: Pressure Sores

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Professor Ferguson-Pell

A colleague of mine, Prof. Michael Clark, drew my attention to the studies you are carrying out on pressure sores suffered by longterm disabled people confined to bed.

I am working on the desing of a friction-free fabric which also has a bearing on the issue of pressure sores and feel that a meeting with you could be of benefit to us both.

I have tried to contact you by telephone without success. Would you therefore kindly ring me on the following number to discuss this issue.

020 8771 9148

Yours sincerely,

Tony Pike
A.P.A. Parafricta

Exhibit B

Tony Pike

From: "John A Barnes" <John.A.Barnes@GBR.dupont.com>
 To: <tony@paraficta.com>
 Sent: [REDACTED]
 Subject: strength

Tony

typically a 5 cm strip will hold about 3000N - so a 1m wide strip about 60 000N - or about 6 tes

Fabric costs are around GBP 4/m2 uncoated

Regards

John

*Slip sheet = 2 x 1 m² = 8.00 cost.
 + making + profit.
 weight carried 13200 lb. Shear strength
 1 x 1.5. 13200 lb +*

2 x 1 m² = 300 g weight

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Francais Deutsch Italiano Espanol Portugues Japanese Chinese Korean

http://www.DuPont.com/corp/cmail_disclaimer.html

*Shear strength (1 kN = 220 lb or 100 Kg)
 60000 N or 13200 lb.
 220 lb or 100 Kg 1 m² paraficta fabric*



DU PONT (U.K.) LIMITED
ERMIN STREET, BROCKWORTH
GLOUCESTER, GL3 4HP

TELEPHONE: GLOUCESTER (01452) 633211
 TELFAX: (01452) 633213

Exhibit C

ADVICE NOTE No. GTC 1149

CUSTOMER ORDER No.
 PLEASE QUOTE THIS ADVICE NO. ON
 INVOICES AND COMMUNICATIONS
 ALL INVOICES STRICTLY NETT.
 E. & O. E.

TO (HAULIER)

IMPORTANT CREDIT (I) If credit is due to Du Pont (U.K.) Limited in respect of returnable packages or other material specified on this Advice Note, a Credit Note should be issued immediately on receipt and should bear the Advice Note Reference.

(II) If no Credit Note is received within a reasonable period a Debit Note will be issued for the amount due.

NOTIFICATION OF LOSS OR DAMAGE IN TRANSIT When materials or returnable packages are sent for any reason, the consignee must notify the sender and carrier in writing of any of the following, within the time limit specified, in order to protect the interest of both in any claim against the carrier.

(1) DAMAGE OR PARTIAL LOSS WITHIN 3 DAYS OF RECEIPT

(2) NON RECEIPT (A) When despatched by road in the U.K. or by any means of transport in Northern Ireland or Eire within 10 days of Advice Despatch or (where applicable) Debit Note, whichever is the earlier.

(B) When despatched by rail or water in the U.K. within 21 days of Advice of Despatch/Debit Note (if applicable) whichever is the earlier.
 In the absence of the above, the consignment will be deemed to have been received by the consignee and in a satisfactory condition.

DELIVER TO:-

No Claim for loss or damage will be considered unless specified in writing on day of delivery to:-

DU PONT (U.K.) LIMITED
 ERMIN STREET
 BROCKWORTH
 GLOUCESTER, GL3 4HP

Tony Pike
 10, AUCKLAND CLOSE,
 LONDON.
 SE19 2DA.
 ON [REDACTED]

QTY. AND TYPE OF PACK

DESCRIPTION

SIZE

PLEASE RECEIVE:-

1 x 10m (approx) Roll of Air Bag Fabric
 Ref: 99W-003/2.

SENT ON BEHALF of Tony Pike Sing.

THE ABOVE HAS BEEN PACKED IN 1 Roll cartons/cases
 TOGETHER WITH GOODS ON ADVICE NOTES SERIAL NOS.

COLLECTING VEHICLE REG. No. TARGET TOTAL GROSS WEIGHT

37 489078

4.0 KGS

TONS	CWTS	QRS	LBS.

THE MATERIALS LISTED HEREON HAVE BEEN RECEIVED IN GOOD CONDITION

COLLECTING
 DRIVERS SIGNATURE

DATE

Michael Clark

From: Tony Pike <tony@parafricta.com>
Sent: [REDACTED]
To: Michael Clark
Cc: Andrew Muir
Subject: Competition and Belfast Trip

Dear Mike

I was very grateful to receive the information you have prepared on competitive products in the range of slip sheets and pressure sore treatments. From the Belfast conference feedback, it seems that the nursing and medical fraternity are not aware (or not satisfied) with what is on offer.

My approach to the treatment of pressure sores is that we design a method of covering the dressing that covers the wound and then provide a base sheet, both made of Parafricta Fabric. Medical experts I spoke with in Belfast are of the opinion that this would result in a cure for the basic problem confronted by the medics, which is, that friction crumples the dressing and exposes the wound. I am arranging to meet some of the delegates from Belfast, in particular, Dr. Patricia Grocott, speaker at the conference titled "The Wrap Project". Dr. Grocott is a Senior Project Manager at Kings College Hospital, specialising in treatment of wounds. She is also on the Board of the College of Nursing and was very interested in the possibilities offered by the use of Parafricta "back to back" which helps to keep wound dressings in place.

Belfast has made me realise that the competitive edge provided by the possible range of Parafricta products has to be exploited with all speed.

I am expecting the results of the testing at N.P.L. next week and want this information before meeting with Ferno again. I would also like to see our patent on Parafricta Fabric started before we reveal too much to our new contacts from the conference.

Kind regards and thanks for all your work.

Tony.

Exhibit E

Tony Pike

From: "Mark Gee" <mark.gee@npl.co.uk>
To: <tony@parafricta.fsnet.co.uk>
Sent: [REDACTED]
Attach: Friction Measurements of Parafricta Fabric.doc
Subject: Friction results

Tony

Here you are, I hope that is self explanatory. Let me know if you need further interpretation, but the bottom line is in Figure 2 where the lower to zero you get the lower the friction. I will formalise this document next week and sort out the invoicing.

Mark

<<Friction Measurements of Parafricta Fabric.doc>>

This e-mail and any attachments may contain confidential and/or privileged material; it is for the intended addressee(s) only. If you are not a named addressee, you must not use, retain or disclose such information.

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Registered Office: Teddington, Middlesex, United Kingdom TW11 0LW.

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W. on Welft.*



Friction Measurements of Parafricta Fabric

A block on flat measurement technique was used (Figure 1). A 50 x 50 mm sledge wrapped in test fabric was pulled over a flat plate which was covered by a sheet of the second fabric to be tested. The sledge was pulled at a constant speed of 1 mm s^{-1} using a steel wire and a pulley by an Instron mechanical testing system. The load that was needed to pull the sledge gives the frictional load and was recorded throughout the test. The sledge was loaded by weights giving a 40 N vertical load during the test. The friction coefficient is calculated as the frictional force divided by the applied load.

The results are shown schematically in Figure 2, with the main features given in Table 1. The highest friction values were recorded for the linen rubbing against linen where the static friction coefficient was 0.67 and the dynamic friction coefficient was 0.44. By contrast the static friction coefficient and dynamic friction coefficient were about 0.2 for the parafricta rubbing on itself. When parafricta was rubbing on linen, or linen on parafricta the results were very similar with a dynamic friction coefficient of about 0.3 with a slightly higher static friction coefficient.

Table 1, Main results

Sledge Fabric	Flat Fabric	Static Friction	Dynamic Friction
Linen	Linen	0.67	0.44
Parafricta	Parafricta	0.19	0.21
Parafricta	Linen	0.38	0.33
Linen	Parafricta	0.33	0.29

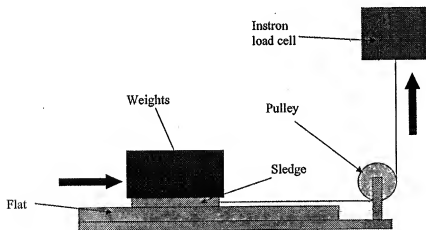


Figure 1, Schematic diagram of test system

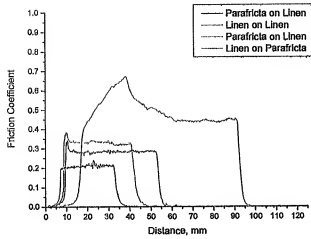


Figure 2, Variation in friction coefficient with sliding distance

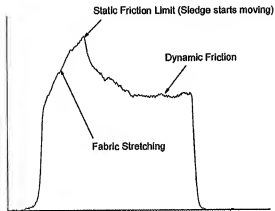


Figure 3, Illustration of static and dynamic friction using linen on linen results as an example.

From: Michael Clark [michael.clark@physics.org]
Sent: [REDACTED]
To: Tony Pike
Cc: Andrew Mulr
Subject: Parafricta Slip Sheet Patent

Follow Up Flag: Follow up
Flag Status: Flagged

Attachments: Some REVISED thoughts for Parafricta Slide Sheet patent application.doc



Some REVISED
thoughts for Para...

Dear Tony

As discussed, the results from NPL are excellent news. Attached are my suggestions on how the new results can be used to formulate a strong inventive step.

I hope that you are able to open the attachment satisfactorily. In case not I have also posted you a copy.

Best regards

Mike

michael.clark@physics.org
Fixed: +44(0)1908 551068
Mobile: +44(0)7711 084702

12 High Street, Stoke Goldington, Newport Pagnell MK16 8NR, UK.
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Some REVISED thoughts for “Parafricta Slip Sheet” patent application

What known problem does the invention solve?

In the care of patients and the elderly there are frequent requirements to move the patient: turning or sitting-up to facilitate medical procedures and transfer to or from a bed, trolley or examination couch. The carrying out of these basic patient handling tasks carries considerable risk of injury to the nurse or carer and, for patients whose skin is vulnerable, the risk of frictional abrasion of the patient's skin. In order to reduce these risks a “slide sheet” or “carry sheet” is sometimes inserted under the patient in order that, as far as possible, the patient can be handled with sliding movements rather than the intrinsically more dangerous lifting.

Existing slide sheets are limited by the friction coefficients of the material in combination with its shear strength. Furthermore, since the coefficient of static friction is normally greater than the coefficient of sliding friction the force that is required to commence movement of the slide sheet becomes excessive as soon as the sheet moves, risking that movement commences with a sudden uncontrolled motion.

In order to get the sheet under the patient it may be necessary to fold the sheet into a concertina pattern and insert it with a series of simultaneous lifts and pulls.

A first purpose of this invention is to provide slide sheets of superior performance in terms of friction coefficients and strength, which are therefore easier to use as they may be pulled under the patient with a single motion.

A further problem that arises from the friction between the patient and the surface of the bed is that movements of the patient can cause wound dressings to become displaced or rucked.

A second purpose of this invention is to provide an arrangement that avoids said friction so that wound dressings remain smooth and undisplaced.

What is the inventive step?

The force F that must be applied to pull the sheet under a patient of weight W is given by:

$$F = 2\mu gW \quad (1)$$

where μ is the coefficient of friction and g the acceleration due to gravity. The coefficient of static friction μ_s applies for movement to commence and the coefficient of dynamic friction μ_d applies once movement is underway.

F must not exceed the strength of the material or it will tear, i.e.

$$F < F_c = \sigma_c \kappa t L \quad (2)$$

where σ_c is the breaking strength of the material, t its thickness, L the linear dimension (width, length, ...) over which F is applied, and κ is a geometrical factor to correct for the fact that the force will not normally be uniform over the linear dimension L . The value of κ will depend on the mode of use and design of the slide sheet and may be determined either by experiment or by computer calculation.

Thus if a slide sheet is specified for use with patients of weight not exceeding W_{max} the material must satisfy:

$$\sigma_c > (2gW_{max}/\kappa t L)\mu \quad (3)$$

in order that it can be pulled under the patient., i.e. the ratio σ_c/μ is a figure of merit for slide sheet material: the larger it is the better the material.

If, as is usual, $\mu_s > \mu_d$ condition (3) is more onerous for the initial commencement of movement.

If the patient is subsequently lifted bodily in the slide sheet there will be a second condition on σ_c , which may be more or less onerous than the above.

The inventive step is the use in the above cited applications of materials that have values of μ_s and μ_d that are both lower than for prior art materials and substantially equal, and have values of σ_c/μ greater than those used in existing slide sheet products.

How is the invention reduced to practice?

In one embodiment of this invention a slide sheet was manufactured from [IDENTIFY DuPONT MATERIAL e.g. BY PRODUCT I.D. OR PATENT NUMBER] and known also by the trade name Parafricta[™]. This material has $\sigma_c = 60000\text{Nm}^{-2}$ and values of μ_s and μ_d shown in the table below. The table shows measured values of μ_s and μ_d for a "material1" moving in contact with a static "material2". For comparison with prior art data on "low friction" linen is also included. From the table it is seen that Parafricta moving over Parafricta has a value for σ_c/μ of 300000Nm^{-2} and Parafricta moving over linen a value of 158000Nm^{-2} increasing to 182000Nm^{-2} once movement has commenced.

material1 sliding on material2		μ_s	μ_d
Linen	Linen	0.67	0.44
Parafricta	Parafricta	0.19	0.21
Parafricta	Linen	0.38	0.33
Linen	Parafricta	0.33	0.29

ADD SOMETHING ABOUT THE PERFORMANCE OF THIS SLIDE SHEET ?

Claims?

1. A slide sheet or functionally similar sheeting device manufactured from material for which μ_s is no more than 20% greater than μ_d and both are less than 0.4
2. A slide sheet or functionally similar sheeting device manufactured from material according to Claim 1 for which σ/μ is substantially equal to or greater than 150000Nm^{-2} .
3. A slide sheet or functionally similar sheeting device according to Claim 1 manufactured from [INSERT GENERIC DESCRIPTION OF DuPONT MATERIAL TYPE].
4. A slide sheet or functionally similar sheeting device according to Claim 3 manufactured from [DuPONT MATERIAL].

ETC

5. A wound dressing that incorporates a backing made from sheeting according to Claim 1.
6. A wound dressing according to Claim 5 used in combination with a slide sheet or functionally similar sheeting device according to Claim 1.

ETC

Exhibit G

Tony Pike

From: "Patricia Grocott" <patricia.grocott@kcl.ac.uk>
To: "Tony PIKE" <tonypike@parafricta.fsnet.co.uk>; "natasha browne" <natasha.browne@kcl.ac.uk>
Cc: "Andrew Muir" <Andrew.Muir@nesta.org.uk>
Sent: [REDACTED]
Subject: Re: meeting at King's

Dear Tony

Thank you for taking the trouble to visit us and to show your interesting fabric.

We have a Southern Medical Alliance meeting on [REDACTED]. I have already given an outline of your project to Andrew Gibson, the Project leader for SMA. I will be back in touch with you. I have had a chance to discuss Parafricta with them. Introducing your concept into the NHS is not uncomplicated and projects need to be set up with ethical clearance before we can approach NHS staff or patients. It can however be done!

Best wishes
 Trisha

[REDACTED]
 - [REDACTED] Tony PIKE <tonypike@parafricta.fsnet.co.uk> wrote:

> Dear Patricia
 >
 > Thank you for the interest shown in the Parafricta concept of reduced
 > friction in working with bedridden patients.
 >
 > I believe that there are many ways the Parafricta Fabric could be of use in
 > patient care, but, as I have limited experience in hospital environments, I
 > must leave it to you experts to show how best we can explore these benefits.
 >
 > As discussed, I would be prepared to make up a limited amount of sample
 > Parafricta products, to your specification, for trial purposes, so that we
 > can move forward in serving a known need, rather than an arbitrary concept
 > of our own.
 >
 > I look forward to hearing from you and your colleagues in the near future on
 > how this new tool can be best used in patient care.
 >
 > Kind regards
 >
 > Tony Pike.
 > ----- Original Message -----
 > From: "Patricia Grocott" <patricia.grocott@kcl.ac.uk>
 > To: "Tony PIKE" <tonypike@parafricta.fsnet.co.uk>
 > Sent: [REDACTED]
 > Subject: Re: meeting at King's
 >
 >
 >> Tony
 >> Many thanks. I look forward to seeing you then.
 >> Best wishes
 >> Trisha
 >> [REDACTED]
 >> [REDACTED] Tony PIKE <tonypike@parafricta.fsnet.co.uk> wrote:
 >>
 >>> Dear Patricia
 >>>
 >>> I have left a telephone message but also write to confirm that the new
 >> time
 >>> of [REDACTED] p.m. on the [REDACTED] is fine for me.

[REDACTED]

CONFIDENTIALITY AGREEMENT

Confidentiality Agreement dated [REDACTED] by and between A.P.A. Parafricta
("Disclosing Party") and ("Recipient") *Dr. Keith Grist*

WHEREAS, Disclosing Party and Recipient desire to have further discussions relating to testing and assessment of prototypes of Parafricta™ frictionless or reduced friction fabrics, methods of relieving pressure sores and the movement of injured persons from the scene of accidents with reduced risk of further injury ("the Purpose") designed by Disclosing Party.

WHEREAS, during the course of such discussions, Disclosing Party may disclose valuable information and samples which he considers proprietary and confidential.

NOW, THEREFORE, the parties agree that the following terms and conditions apply to the disclosure of such information and samples:

1. Information disclosed hereunder is "Confidential Information" if it is presented in writing by Disclosing Party and identified as confidential at the time of disclosure, or if it is otherwise presented by Disclosing Party (such as orally, visually (including in the form of visits to facilities) or by other medium) and outlined in writing and identified as confidential within thirty (30) days of the disclosure.
2. Recipient shall only use the Confidential Information to achieve the Purpose, and for a period of five (5) years after the disclosure of Confidential Information, Recipient will not otherwise use or disclose the Confidential Information except to other parties as may be agreed in advance in writing with Disclosing Party.
3. Samples disclosed hereunder are "Confidential Samples" if they are delivered by Disclosing Party and identified in writing as confidential. Confidential Samples include the sample materials and information or knowledge obtained by inspection or evaluation thereof. In submitting samples, Disclosing Party makes no warranty as to the commercial availability of the products relating to any Confidential Samples and maintains the right to commercialize such products for any use.
4. For a period of five (5) years after the date of disclosure of a Confidential Sample, Recipient will not (a) use that Confidential Sample for other than the Purpose, (b) sell, show, or give Confidential Samples, or products made from Confidential Samples, to any third party, or (c) disclose the results of tests and experiments conducted on Confidential Samples to any third party. Recipient may evaluate Confidential Samples if necessary to achieve the Purpose, and shall disclose the results of all tests and experiments to Disclosing Party.
5. The obligations under Paragraphs 2 and 4 shall not apply to any information or sample which:
 - (a) is or becomes known to the public through no fault of Recipient;

- (b) is known to Recipient prior to its receipt from Disclosing Party as shown by prior written records of Recipient;
- (c) becomes known to Recipient by disclosure from a third party who has a lawful right to disclose the information; or
- (d) is required to be disclosed by applicable law or order of a court of competent jurisdiction (provided, that in either case if Recipient is required to make such disclosure, it shall immediately give written notice to Disclosing Party of its obligation to make such disclosure).
6. Nothing in this Agreement shall be construed (a) to grant to Recipient any right or license under any patent, know-how, trade secret, invention, discovery or improvement of Disclosing Party, or (b) require Recipient to purchase or Disclosing Party to supply any goods, materials or services.
7. Recipient shall restrict the disclosure of Confidential Information and Confidential Samples to those employees who need to know the Confidential Information or who need access to the Confidential Samples in order to achieve the Purpose. Prior to disclosing Confidential Information or any Confidential Sample to such employee, Recipient shall ensure that each such employee is written, statutory of common law obligation to maintain the confidentiality thereof and such obligation is at least as stringent as the terms of this Agreement. Recipient may disclose Confidential Information and Confidential Samples to its affiliated organisations and Recipient accepts responsibility that its affiliated organisations will abide by the confidentiality and non-use provisions of this Agreement. The term "affiliated organisations" includes any entity belonging to the group of entities in which Recipient is a member through direct or indirect majority ownership interest.
8. Upon written request of Disclosing Party, Recipient will promptly return all Confidential Information and Confidential Samples (including all copies and results of all tests).
9. Disclosing Party may provide Confidential Information and Confidential Samples under this Agreement for two (2) years from the date set forth above, and this Agreement shall expire at the end of such two year period unless earlier terminated or extended by mutual written consent. Neither expiration nor termination will affect the obligations under Paragraphs 2 and 4 herein.
10. This Agreement shall be governed by and construed in accordance with the laws of England and Wales.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives effective as of the date set forth above.

Signed	<u>John G. Frost</u>	Signed	<u>[Signature]</u>
Name	<u>John G. Frost</u>	Name	<u>Anthony Lee</u>
Title	<u>VC</u>	Title	

Exhibit H

Tony PIKE

From: "John A Barnes" <John.A.Barnes@GBR.dupont.com>
To: <tony@paraficta.fsnet.co.uk>
Sent: [REDACTED]
Attach: typical 350 spec.xls
Subject: fabric

fabric is manufactured from bright, high tenacity nylon with a linear density of between 156 and 940 decitex (wt in grammes per 10 000 m) and having a tenacity of greater than 60cN/tex

Fabric cover factor is greater than 70, where cover factor is defined as (warp count/cm* $\sqrt{\text{tex}}$) + (weft count/cm* $\sqrt{\text{tex}}$).

Typical fabric properties are attached for the fabric you most recently used:

(See attached file: typical 350 spec.xls)

This communication is for use by the intended recipient and contains information that may be privileged, confidential or copyrighted under applicable law. If you are not the intended recipient, you are hereby formally notified that any use, copying or distribution of this e-mail, in whole or in part, is strictly prohibited. Please notify the sender by return e-mail and delete this e-mail from your system. Unless explicitly and conspicuously designated as "E-Contract Intended", this e-mail does not constitute a contract offer, a contract amendment, or an acceptance of a contract offer. This e-mail does not constitute a consent to the use of sender's contact information for direct marketing purposes or for transfers of data to third parties.

Francais Deutsch Italiano Espanol Portugues Japanese Chinese Korean

http://www.DuPont.com/corp/email_disclaimer.html

[REDACTED]

From: Tony PIKE [tonypike@parafricta.fsnet.co.uk]
Sent: [REDACTED]
To: Michael Clark; charlie.hunt@nesta.org.uk
Subject: Fw: fabric

Follow Up Flag: Follow up
Flag Status: Completed

Attachments: typical 350 spec.xls



typical 350 spec.xls
(19 KB)

Dear Mike, Charlie

As my telephone message, following DuPont fabric specification.

Regards

Tony

----- Original Message -----

From: "John A Barnes" <John.A.Barnes@GBR.dupont.com>

To: <tony@parafricta.fsnet.co.uk>

Sent: [REDACTED]

Subject: fabric

- > fabric is manufactured from bright, high tenacity nylon with a linear
- > density of between 156 and 940 decitex (wt in grammes per 10 000 m) and
- > having a tenacity of greater than 60cN/tex
- >
- > Fabric cover factor is greater than 70, where cover factor is defined as
- > (warp count/cm* $\sqrt{\text{tex}}$) + (weft count/cm* $\sqrt{\text{tex}}$).
- >
- > Typical fabric properties are attached for the fabric you most recently
- > used:
- >
- > (See attached file: typical 350 spec.xls)
- >
- >
- > This communication is for use by the intended recipient and contains
- > information that may be privileged, confidential or copyrighted under
- > applicable law. If you are not the intended recipient, you are hereby
- > formally notified that any use, copying or distribution of this e-mail,
- > in whole or in part, is strictly prohibited. Please notify the sender
- > by return e-mail and delete this e-mail from your system. Unless
- > explicitly and conspicuously designated as "E-Contract Intended",
- > this e-mail does not constitute a contract offer, a contract amendment,
- > or an acceptance of a contract offer. This e-mail does not constitute

> a consent to the use of sender's contact information for direct marketing
> purposes or for transfers of data to third parties.
>
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>
> http://www.DuPont.com/corp/email_disclaimer.html
>
>

INVOICE

Exhibit J

TO: <i>Tommy Pike</i> 10 Auckland Close London SE19 2DA		CATHERINE TAYLOR 8 AUCKLAND CLOSE LONDON SE19 2DA			
INVOICE DATE	ORDER No.	CARRIER	TYPE OF SUPPLY	DATE OF SUPPLY	INVOICE No.
					C200314
QUANTITY	DESCRIPTION		PRICE	PER	AMOUNT
1	PROTOTYPE STRETCHER				
1	" BED COVER				
1	" BED SOCK				
SPECIAL INSTRUCTIONS			GOODS TOTAL VAT % INVOICE TOTAL		

Exhibit K

Tony Pike

From: "Mark Gee" <mark.gee@npl.co.uk>
To: <tony@parafricta.fsnet.co.uk>
Sent: [REDACTED]
Attach: Friction Measurements of Parafricta Fabric.doc
Subject: Parafricta Friction

Tony

I have done three more tests for you and the results are appended to the report which is attached. There was actually little measurable difference with the lay of the cloth in the test.

Could you please indicate you are happy with the report, and I will then issue it formally and invoice you.

I am afraid that the cost has now gone up with the additional testing to [REDACTED] I trust this will be acceptable.

Mark

<<Friction Measurements of Parafricta Fabric.doc>>

This e-mail and any attachments may contain confidential and/or privileged material; it is for the intended addressee(s) only. If you are not a named addressee, you must not use, retain or disclose such information.


NPL Management Ltd cannot guarantee that the e-mail or any attachments are free from viruses.

NPL Management Ltd. Registered in England and Wales. No: 2937881
Registered Office: Teddington, Middlesex, United Kingdom TW11 0LW.



Exhibit L

Tony Choy-Sing
Du Pont (U.K.) Limited,
Ermin Street,
GLOUCESTER
GL3 4HP.



Dear Tony,

Enclosed is the sample of the fabric that Ian sent to me. It is a very good quality and compliments the samples you kindly sent me.

As you can see from the enclosed friction test sheets, Du Pont fabric is unique in that static and dynamic are lineal which is great for my particular application.

I hope you can get the results for me so that I can have the same tests done at the N.P.L.

Many thanks for your continuing help.

Regards,

Your sincerely,

Tony Pike.

Exhibit M

Tony Pike

From: "Tony Choy-Sing" <Tony.Choi-Sing-1@GBR.dupont.com>
To: <Tony@parafricta.fsnet.co.uk>
Cc: "John A Barnes" <John.A.Barnes@GBR.dupont.com>; "Iain M Bradley"
<iain.M.Bradley@gbr.dupont.com>; "Keith H Mason" <Keith.H.Mason@gbr.dupont.com>
Sent: [REDACTED]
Subject: 50115 Fabric for parafricta

Hi Tony,

The fabric Iain sent to you was a 50 decitex fabric with the following details:

REF: 98WExt/4
warp 50 fl5 T143
weft 50 fl5 T1943
finished construction 61x47 /cm
finished weight 61.7g/m(superscript: 2)

Finishing route - jig scour/jig dye (OBA)/Teflon® HT/Heat set 190°C

Regards
Tony

This communication is for use by the intended recipient and contains information that may be privileged, confidential or copyrighted under applicable law. If you are not the intended recipient, you are hereby formally notified that any use, copying or distribution of this e-mail, in whole or in part, is strictly prohibited. Please notify the sender by return e-mail and delete this e-mail from your system. Unless explicitly and conspicuously designated as "E-Contract Intended", this e-mail does not constitute a contract offer, a contract amendment, or an acceptance of a contract offer. This e-mail does not constitute a consent to the use of sender's contact information for direct marketing purposes or for transfers of data to third parties.

Francais Deutsch Italiano Espanol Portugues Japanese Chinese Korean

http://www.DuPont.com/corp/email_disclaimer.html



DU PONT (U.K.) LIMITED
ERMIN STREET, BROCKWORTH
GLOUCESTER, GL3 4HP

TELEPHONE: GLOUCESTER (01452) 633211
 TELFAX: (01452) 633213

Exhibit N

ADVICE NOTE No. GTE 1379

CUSTOMER ORDER No.
 PLEASE QUOTE THIS ADVICE NO. ON
 INVOICES AND COMMUNICATIONS
 ALL INVOICES STRICTLY NETT.

E. & O. E.

TO (HAULIER)

IMPORTANT CREDIT (i) If credit is due to Du Pont (U.K.) Limited in respect of returnable packages or other material specified on this Advice Note, a Credit Note should be issued immediately on receipt and should bear the Advice Note Reference.

(ii) If no Credit Note is received within a reasonable period a Debit Note will be issued for the amount due.

NOTIFICATION OF LOSS OR DAMAGE IN TRANSIT When materials or returnable packages are sent for any reason, the consignee must notify the sender and carrier in writing of any of the following, within the time limit specified, in order to protect the interest of both in any claim against the carrier.

(1) DAMAGE OR PARTIAL LOSS WITHIN 3 DAYS OF RECEIPT

(2) NON RECEIPT (A) When despatched by road in the U.K. or by any means of transport in Northern Ireland or Eire within 10 days of Advice Despatch or (where applicable) Debit Note, whichever is the earlier.

(B) When despatched by rail or water in the U.K. within 21 days of Advice of Despatch/Debit Note (if applicable) whichever is the earlier.

In the absence of the above, the consignment will be deemed to have been received by the consignee and in a satisfactory condition.

DELIVER TO:-

Tony PKE

No Claim for loss or damage will be considered unless specified in writing on day of delivery to:-

DU PONT (U.K.) LIMITED
 ERMIN STREET
 BROCKWORTH
 GLOUCESTER, GL3 4HP

ON

Y. AND TYPE OF PACK

DESCRIPTION

SIZE

1

x 3 METERS OF FABRIC AS REQUESTED

Regar

WEAVER

(W7306)

More product

THE ABOVE HAS BEEN PACKED IN1..... CARTONS/CASES
 TOGETHER WITH GOODS ON ADVICE NOTES SERIAL NOS.

COLLECTING VEHICLE REG. No. 37 429085 TOTAL GROSS WEIGHT

TONS	CWTS	QRS.	LBS.

THE MATERIALS LISTED HEREON HAVE BEEN RECEIVED IN GOOD CONDITION

COLLECTING
 DRIVERS SIGNATURE

DATE

Exhibit Q



Du Pont (U.K.) Limited
Legal Department
Wedgwood Way
Stovenage
Hertfordshire, SG1 4DN
Tel (01438) 734000 Fax (01438) 734585

[REDACTED]
Mr A Pike
A.P.A. Parafricta
10 Auckland Close
Upper Norward
London
SE19 2DA

Dear Mr Pike


Re: Supply Agreement – Subject to Contract

In anticipation of your meeting with Ian Bradley next week, I attach a draft Supply Agreement.

Please note that the draft has been prepared solely to assist in negotiations between the parties, and is not intended for signature in its current form.

Kind regards.

Yours sincerely


Sarah F. Clements *of GBR.dupont.com*
Counsel and Company Secretary

Enc

Exhibit P

CHARTERED PATENT ATTORNEYS • EUROPEAN PATENT ATTORNEYS • REGISTERED TRADE MARK ATTORNEYS
PATENTS DESIGNS & TRADE MARKS THROUGHOUT THE WORLD

Raworth Moss & Cook

Raworth House
36 Sydenham Road
Croydon, Surrey
CR0 2EF, England.

Telephone: +44 (0)20 8688 8318
Facsimile: +44 (0)20 8760 0055
E-mail: rmc@raworth.co.uk
Web Site: www.raworth.co.uk



Our ref:

TBS/BAR/37517.GBA

Your ref:

Mr A B Pike
10 Auckland Close
Upper Norwood
London, SE19 2DN

Dear Tony

Re **GB Patent Application No 0314659.4**
In the name of Anthony Bruce PIKE
Medical Protection Sheeting

I have pleasure in enclosing herewith the official filing receipt for this application together with a formal copy of your application as filed. The details are as follows:

Application No:	0314659.4
Filing Date:	24 June 2003
Priority:	None
Title:	Medical Protection Sheeting
Applicant:	Anthony Bruce PIKE
Documents Filed:	Description: 7 sheets
	Claims: None



Partners - S J Wise, MA (Cantab), M Eng, CPA, EPA, RIMA, MITMA, ETMA, G A Feakins, CPA, EPA, RIMA.

Assisted by - T Bain Smith, CPA, Rebecca Ferrari, MA, RIMA, MITMA, ETMA.
A W Rackham, BSc (Eng).

Office Administrator - Lisa Dunning

Consultant - W G Adams, CPA, EPA.



To: Mr A B Pike



Drawings:	3 sheets
Abstract:	None
Statement of Invention:	None
Request for Search:	None
Request for Examination:	None

I shall keep you informed as to the progress of this matter.

Enclosed in duplicate is our debit note.

Yours sincerely

A handwritten signature in dark ink, appearing to be 'T. Smith'.

T Bain Smith
RAWORTH MOSS & COOK

Encls: Filing receipt
 Formal copy of application as filed
 Debit Note in duplicate

CHARTERED PATENT ATTORNEYS • EUROPEAN PATENT ATTORNEYS • REGISTERED TRADE MARK ATTORNEYS
PATENTS DESIGNS & TRADE MARKS THROUGHOUT THE WORLD

Raworth Moss & Cook

Raworth House
36 Sydenham Road
Croydon, Surrey
CR0 2EF, England.

Telephone: 020 8688 8318
Facsimile: 020 8760 0055
E-Mail: rnc@raworth.co.uk

Mr A B Pike

10 Auckland Close
Upper Norwood
London, SE19 2DN

DEBIT NOTE No: 3-032

OUR REF: TBS/BAR/37517.GBA

YOUR REF:

DATE/TAX POINT:

OUR V.A.T. REGISTRATION NO: GB 407 3777 42

YOUR V.A.T. REGISTRATION NO:

£ Sterling

Re: GB Patent Application No 0314659.4
In the name of Anthony Bruce PIKE
Medical Protection Sheeting

To: Our services in filing the above application at the UK Patent Office; including typing
the specification; filing Description and Drawings; reporting to you and to Dr Clark;
including our Professional Time and our facsimile, photocopying and postage
charges:

Bill

Sub total
V.A.T. @ 17.5%
TOTAL

BANKERS:

For Payments in Sterling:
HSBC plc, London
Code: 40-07-13
Account: 20690244

For Payments in Euros:
HSBC plc, London
Code: 40-08-15
Account: 37926061

For Payments in US\$
Citibank, New York
Code: 021000021
Account: 006-069665

TERMS: NETT 30 DAYS

PLEASE ENSURE ALL BANK
CHARGES ARE DEBITED TO YOUR
ACCOUNT

12/1

DIARY RECORD OF MEETINGS WITH DUPONT (LATER INVISTA) ETC. DURING [REDACTED]
to [REDACTED]

(1)

Copy of technical aspects for Parafricta Medical Sheeting sent to John Barnes for interest.

(1)

Meeting with John Barnes at Chieveley Service Station to discuss technical aspects and supply of fabric for testing.

(1)

Telephone conversation on medical sheeting with John Barnes and testing at NPL by Mark Gee.

(1)

Meeting with John Barnes and Tony Choi Singh on samples of fabric for further tests. Agreed that DuPont fabric with a low coefficient of friction which is the same dynamic and static both being equal as tested at NPL. The fabric tested was woven and is between 1000 and 40 decitex. The linear density is 470, 350 or 50 decitex with a weight of 50 and 200 gm/m² both samples light weight and heavy weight were 180 gm/2m for the 350 decitex material and 62 gm/m² for the 50 decitex material.

(2)

Results from NPL emailed to me by Mark Gee and forwarded to John Barnes for interest.

(2)

Results from NPL forwarded to Tim Bain-Smith.

(2)

Meeting DuPont, Brockworth with John Barnes to discuss NPL results.

(2)

Meeting with Tim Bain Smith on results of my meetings with John Barnes and the NPL results.

(2)

Meeting at Brockworth with Ian Bradley of DuPont on patent application for Parafricta Fabric Medical Sheeting. I was encouraged to pursue the patent filing and was told that Parafricta brand would be exclusive for medical applications only Worldwide.

(3)

Meeting with Ian Bradley and John Barnes to discuss progress with Parafricta products, prototypes and acceptances in the medical field.

Tue., June 24, 2003

Patent No. 0314 659.4 filed 24.6.03.

(1) Date Prior February 21, 2003

(2) Date post February 21, 2003 and prior May 15, 2003

(3) Date post May 15, 2003 and prior June 24, 2003